

18 9500

S/058/62/000/006/061/136
A061/A101

AUTHORS: Stepanov, I. V., Vasil'yeva, M. A.

TITLE: Control of the heat factor in growing optical single crystals

PERIODICAL: Referativnyy zhurnal, Fizika, no. 6, 1962, 10, abstract 6E83
(In collection: "Rost kristallov. T. 3". Moscow, AN SSSR, 1961,
223 - 238. Discuss., 501 - 502)

TEXT: This is a detailed report on the results of work conducted to improve the techniques of Kiropoulos and Bridgman-Stokbarger, which have led to the creation of a series of apparatus for the mass growing of optical single crystals. The most accomplished design of a furnace, permitting high-quality optical crystals to be obtained, is described. The most important conditions of single crystal growth are the stable maintaining of the isothermal surface of crystallization on one constant level and its convex shape. These conditions ensure the homogeneity and the high purity of the growing single crystal, and allow high growth rates to be used. 18

[Abstracter's note: Complete translation]

A. Makarevich

Card 1/1

S/058/62/000/006/059/136
A061/A101

AUTHORS: Stepanov, I. V., Vasil'yeva, M. A., Sheftal', N. N.

TITLE: The effect of the temperature drop magnitude at the crystal - melt interface on the growth of single crystals. I. Experimental data

PERIODICAL: Referativnyy zhurnal, Fizika, no. 6, 1962, 9, abstract 6E78
(In collection: "Rost kristallov. T. 3". Moscow, AN SSSR, 1961,
239 - 243. Discuss., 501 - 502)

TEXT: Experimental results of an investigation of the optimum thermal conditions of the growth of single crystals from the melt by Tamman's method are presented. An apparatus with a "mobile thermocouple", ensuring the shift of the crystallization isotherm in the furnace and permitting the precise control of temperature and crystal growth rate, is described. However, the quality of the optical single crystals grown in this apparatus is not satisfactory. The Tyndall effect in grown LiF single crystals has been found to be remarkably reduced under conditions of a sharp temperature drop at the crystal - melt interface and of considerable overheating (up to 250 C). It is stated on the strength of experi-

Card 1/2

The effect of the...

S/058/62/000/006/059/136
A061/A101

ments, that the sharp and significant temperature drop at the boundary of the growing crystal, as well as the high temperature of the melt, from which the single crystal is grown, are powerful factors acting very markedly on formation and ensuing crystal properties. *V*

A. Makarevich

[Abstracter's note: Complete translation]

Card 2/2

VASIL'YEV, M.M.

AID MR. 983-8 12 June

INSTRUMENT FOR MEASURING THE QUASI-CONTACT POTENTIAL OF A
p-n JUNCTION (UDSSR)

Sinitsyn, N. P., and M. A. Vasil'yeva, Pribory i tekhnika eksperimenta, no. 2,
Mar-Apr 1966, 179-180.

S/120/63/000/002/040/041

The quasi-contact potential of alloyed surface-barrier p-n junctions is measured by utilizing a system which requires that the diode frequency ω supplied by a current generator be selected in such a manner as to ensure a high degree of coincidence between total diode resistance and the resistance of the barrier layer. At the same time, the amplitude of the voltage developed in the diode should not exceed several mv. A voltage generator at frequency $\Omega \ll \omega$ with an amplitude of approximately 1 to 2 v is connected, in parallel to the current generator, to the diode through a decoupling choke, and the joint action of the two generators produces in the diode a voltage of frequency ω whose amplitude is modulated at frequency Ω and which is proportional to p-n junction capacitance C^{-1} . The voltage is applied, after amplification, to a square-law element through a cathode follower.

Card 1/2

REF ID: A6563 12 June

INSTRUMENT FOR MEASURING (Cont'd)

2/120/63/ccc/ccc/cdc/cdc

A voltage of frequency ω_0 , whose amplitude is modulated at frequency Ω and which is proportional to C^{-1} , appears at the square-law element output. After detection and amplification, this voltage is applied to the input of the vertical amplifier of the oscilloscope, while the horizontal amplifier receives the same voltage as the p-n junction. The oscilloscope shows a straight line in coordinates $K_1 C^{-1} - K_2 V$, where K_1 and K_2 are constants and V is the quasi-constant potential. If the position of the zero line in relation to the horizontal axis is known, the value of the quasi-constant potential can be determined after extrapolation of the straight line at its intersection with the zero line.

[DW]

Card 2/2

S0187

S/070/60/095/02/003/003
E132/E260

5.1150

AUTHORS: Stepanov, I. V., Deceased, Vasil'yeva, M. A., and
Sheftal', N. N.TITLE: Obtaining Single Crystals From the Melt in Conditions
of Sharply Falling Temperature

PERIODICAL: Kristallografiya, 1960, Vol 5, Nr 2, pp 334-335 (USSR)

ABSTRACT: The authors earlier formulated the problem of growing
large single crystals in the following form: "One of
the most important conditions for the growth of a single
crystal is the strict control of the direction and quantity
of the heat flowing to the crucible from the melt and
from the crystal. The whole thermal system must be
arranged so that the amount of heat supplied at each
element of surface limiting the crystallising mass should
compensate its loss, with a certain small excess, except
at the surface of separation of the crystal and the melt
(the growing surface) which should be the place with the
greatest heat deficit. In such conditions the possibility
of further nucleation is excluded. The regular displace-
ment of the isothermal surface of crystallisation during
the growth of the crystal and the convexity of its form" ✓

Card 1/3

80 187

S/070/60/005/02/003/003
E132/E260

Obtaining Single Crystals From the Melt in Conditions of Sharply Falling Temperature

are just as important. These conditions ensure a high uniformity and purity for the growing crystal and permit a high rate of growth to be used". To these conditions must now be added one emphasising the importance of the steepness of the temperature drop between the melt and the growing surface. The earlier Stockbarger furnace did not give a sharp drop in temperature at the diaphragm so it was modified by cooling the diaphragm and the lower chamber. This stabilised the crystallisation isotherm at the diaphragm. The melt could then be made very hot. Imperfections giving a Tyndall effect in synthetic crystals are often found but they were almost absent with this system of growth. The purifying effect was also marked. The optical properties were improved, in LiF, for example. ¹LiF crystals could be grown at 60 mm/hour as compared with 10 mm/hour formerly. This is not the limit but the mosaic nature of the surface increases. The points to emphasise are the great

Card 2/3

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S/070/60/005/02/003/003
E132/E260

Obtaining Single Crystals From the Melt in Conditions of Sharply
Falling Temperature

superheating of the melt and the steep temperature drop
across the growing surface of the crystal.

ASSOCIATION: Institut kristallografii AN SSSR (Institute of
Crystallography, AS USSR)

SUBMITTED: November 25, 1959

W

Card 3/3

9.6150
24,3500 (1137,1138,1395)

20815
S/048/61/025/003/003/047
B104/B201

AUTHORS: Vasil'yeva, M.A., Kuprevich, V.V., Stepanov, I.V.
(Deceased), and Feofilov, P.P.

TITLE: Single-crystal cathodoluminescence screens

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya,
v. 25, no. 3, 1961, 321 - 323

TEXT: This is a reproduction of a lecture delivered at the 9th Conference on Luminescence (Crystal Phosphors), which took place in Kiev from June 20 to 25, 1960. The authors developed and studied single-crystal cathodoluminescence screens, prepared from fluorite (CaF_2), fluorostrontium and fluorobarium, and activated with uranium and various rare earths (Sm, Eu, Tb, Dy, Ho, Er, Tm). The single crystals were bred in accordance with Bridgman and a method proposed by I.V. Stepanov. The activator was deposited in the form of a first layer of UO_2F_2 or fluorides of the rare earths. The green luminescence of uranium-activated screens could be excited by an electron beam or by ultraviolet light. The color of screens activated with

Card 1/4
3

20815

S/048/61/025/003/003/047

B104/B201

Single-crystal cathodoluminescence ...

rare earths changed somewhat on the passage from fluorostronium or fluorobarium, and a variation of the rare earths gave rise to various colors of the luminescence. The spectra of cathodoluminescence of the screens were found to be practically identical with the spectra of photoluminescence. The single crystals of the fluorides of alkali-earth metals possess a low surface conductivity, and therefore the screens were provided with silver or aluminum films at the excitation side to prevent them from being charged electrically. As an example, results concerning the $\text{CaF}_2\text{-Eu}$ screen are graphically illustrated in Figs. 1 and 2. Fig. 1 shows the light yield of the cathodoluminescence of this screen as a function of the activator concentration at electron excitation (11 kv , $j = 10^{-7} \text{ a/cm}^2$). Fig. 2 shows for two screens the resolution μ as a function of the electron energy at a current density of $j = 10^{-8} \text{ a/cm}^2$. The temperature extinction of luminescence and the duration of the afterglow were determined under ultraviolet light. Apart from the $\text{CaF}_2\text{-Eu}$ screen, where a temperature extinction was observable at 50°C , no extinction was observed in any of the other screens up to 200°C . The afterglow in Eu-activated screens lasted 10^{-7} seconds, and 10^{-4} seconds in uranium-activated ones.

Card 2/
3

S/048/61/025/003/003/047
B104/B201

Single-crystal cathodoluminescence ...

while these times ranged between 10^{-2} and 10^{-3} seconds with the other screens. When rigorous breeding conditions were observed, screens under the action of electron rays with current densities of $10^{-7} - 10^{-8}$ a/cm² conserved the brightness of luminescence for dozens of hours. The screens described are very stable against atmospheric actions and temperature fluctuations. There are 2 figures and 6 references: 4 Soviet-bloc and 2 non-Soviet-bloc. The 2 references to English language publications read as follows: Bridgman P.W., Proc.Amer. Acad.Sci., 60, 306, (1925), Stockbarger D.J., Opt. Soc. America, 39, 731, 1949

Card 3/4
3

S/169/62/000/007/065/149
D228/D307

AUTHORS: Vasil'yeva, M. A., Vlasova, I. I. and Rymanov, V. M.

TITLE: Some problems in the compilation of a composite small-scale map of the USSR's magnetic anomalies (Discourse theses)

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 7, 1962, 30, abstract 7A199 (V sb. Sostoyaniye i perspektivy razvitiya geofiz. metodov poiskov i razvedki polezn. iskopayemykh, M., Gostoptekhizdat, 1961, 516)

TEXT: Defects in the method of regional surveys were ascertained when compiling a composite magnetic anomaly map on a scale of 1:1,000,000 for the eastern half of the USSR's European part. Recommendations are given for the method of surveys, their tying in to absolute values, and for the preparation of composite maps. It is expedient to create an All-Union reference aeromagnetic network.
/Abstracter's note: Complete translation. ✓

Card 1/1

VASIL'YEVA, M.A.; VLASOVA, I.I.

Some problems in compiling an adjusted map of magnetic anomalies
of the U.S.S.R. at a scale of 1:1,000,000. Razved.i prom.geofiz.
no.44:111-116 '62. (MIRA 15:7)
(Magnetism, Terrestrial--Maps)

BERDYYEV, A.A.; VASIL'YEVA, M.G.; LEZHNEV, N.B.

Absorption of ultrasonic waves in some liquids.
Trudy fiz.-tekhn. inst. AN Turk. SSR 8:19-48
'62. (MIRA 15:11)
(Ultrasonic waves)

BERDYYEV, A.A.; SHIRDZHANOV, N.; VASIL'YEVA, M.G.

Results of investigating the absorption of ultrasonic waves in
certain liquids and mixtures. Trudy Inst.fiz.i geofiz.AN Turk.
SSR 5:137-145 '58. (MIRA 13:6)

(Ultrasonic testing)
(Xylene)
(Benzene)

BERDYYEV, A.A.; VASIL'YEVA, M.G.

Absorption of ultrasonic waves in viscous liquids at high frequencies. Izv.AN Turk.SSR.Ser.fiz.-tekhn., khim.i geol.nauk no.2:3-12 '62. (MIRA 15:4)

1. Fiziko-tehnicheskiy institut AN Turkmeneskoy SSR.
(Ultrasonic waves) (Absorption of sound)

VASIL'YEVA, M.G.; LALYKINA, V.M.; MAKHARASHVILI, N.A.; SOKOLOVA,
A.L.; SOYFER, V.M.; TSKIRIYA, N.G.; BARON, Ye.Ye.,
doktor khim. nauk, red.

[Analysis of boron and its inorganic compounds] Analiz bora
i ego neorganicheskikh soedinenii. Pod red. E.E.Baroni.
Moskva, Atomizdat, 1965. 267 p. (MIRA 19:1)

VASIL'YEVA, M.G.; SOKOLOVA, A.L.

Determination of boron in technical boron. Zhur.anal.khim. 17
no.4:530-531 Jl '62. (MIRA 15:8)

1. Physico-Technical Institute, Academy of Sciences of the
Georgian S.S.R., Sukhumi.

(Boron--Analysis)

S/202/62/000/002/001/002
D207/D301

AUTHORS: Berdyyev, A.A., and Vasil'yeva, M.G.

TITLE: Absorption of high-frequency ultrasonic waves in viscous liquids

PERIODICAL: Akademiya nauk Turkmeneskoy SSR. Izvestiya. Seriya fizikotekhnicheskikh, khimicheskikh i geologicheskikh nauk, no. 2, 1962, 3 - 12

TEXT: Absorption of 16-159 Mc/s ultrasound was investigated in glycerin, caster oil, cotton seed oil, transformer oil, spindle oil '2', 'CY' ('SU') oil. Absorption was measured with the apparatus described earlier by A.A. Berdyyev and N.B. Lezhnev, viscosity with a capillary viscometer, density with a pyknometer. Temperature was kept constant with a thermostat U-8. Glycerin was investigated in the 19-60°C range at 27-159 Mc/s and the ultrasound absorption in it was found to obey the Stokes' law only up to 1.9 poise; at higher viscosities (lower temperatures) relaxation phenomena produced departures from the Stokes law. The shear and volume (bulk) viscosity

Card 1/2

Absorption of high-frequency ...

S/202/62/000/C02/001/002
D207/D301

cosities of glycerin were of the same order: several poises at 30-60°C. In the oils the ultrasound absorption coefficient (α) did not obey the Stokes law at all, i.e. departures from $\alpha = f(\omega^2)$ were observed (here ω is the angular frequency of the ultrasonic vibrations). In all six liquids the absorption of ultrasound was affected both by shear and volume viscosities. There are 13 figures, 1 table and 9 references: 6 Soviet-bloc and 3 non-Soviet-bloc. The references to the English-language publications read as follows: T.A. Zitzvitz, J. Acoust. Soc. Am., 23, no. 1, 1951; C.S. Venkatesvaran, Proc. Ind. Acad. Sci., A 15, 1942; B.J. Wuench, T.F. Hueter, and M. S. Cohen, J. Acoust. Soc. Am., 18, no. 2, 1956.

ASSOCIATION: Fiziko-tehnicheskiy institut AN Turkmeneskoy SSR (Physical-Technical Institute, Academy of Sciences, of the Turkmenian SSR) ✓

SUBMITTED: November 10, 1961

Card 2/2

I. 17985-62

ENT(1)/ENT(q)/ENT(m)/BDS

AFFTC/ASD/APGC Pg.4 WH

ACCESSION NR: AT3002082

S/2728/62/008/000/0019/0048

AUTHORS: Berdy'yev, A. A.; Vasil'yeva, M. G.; Lezhnev, N. B.

65
64

TITLE: Investigation of the absorption of ultrasonic waves in several liquids

SOURCE: AN Turkam SSR. Fiziko-tehnicheskiy institut. Trudy, v.8, 1962, 19-48

TOPIC TAGS: ultrasonic wave , absorption, ultrasonic property liquide,
optical measurement, ultrasonic absorption, pulse method, ultrasonic absorption
measurement

ABSTRACT: The paper reports the results of experimental investigations of a pulse-type equipment for the measurement of the absorption of ultrasonic (US) waves in liquids within the frequency range from 5 to 200 mcps. The investigation generalizes the results of similar studies made over the past two years. The absorption investigations were performed by optical and pulse methods. The optical-measurement methods were based on the phenomenon of the diffraction of light passing through a medium in which US waves are propagating. The source and the equipment used in the present instance was a spherical extrahigh-pressure Hg quartz lamp, SVDSh-500, capable of operating in the frequency range from 5.0 to 34 mcps. The acoustic generator consisted of piezo-quartz platelets. The US

Card 1/3

L 17985-63

ACCESSION NR: AT3002082

waves were propagated vertically downward. The liquid investigated was placed in a vessel made of high-grade optical glass with plane-parallel walls. The bottom of the vessel was lined with glass wool to avoid the superposition of running and reflected waves in conditions of low absorption. The measurements were performed in monochromatic light. The measurement of the absorption of US waves was accomplished by a measurement of the brightness of the image of the US beam at various points. It was assumed that at the low acoustic amplitudes employed, the intensity of the diffracted light would be proportional to the square of the amplitude of the US oscillations. The brightness was measured by means of photographs taken on fine-grain photographic plates with uniform emulsion. All photographs were developed with the same type of developer under identical development conditions. Control measurements of the absorption coefficient in toluene showed that the error of the measurement did not exceed ± 7 percent. The overall scheme of the pulse equipment comprised a synchronization block, which, on the one hand, controls a sweep generator which at various sweep rates affords a measurement of the absorption for various lengths of the acoustic path, and, on the other hand, controls a modulator which, in turn, produces rectangular pulses which serve for the actuating of the high-frequency (HF) generator. The HF generator emits radio pulses which are delivered to the quartz radiator. The ultra-acoustic pulse thus obtained propagates in a delay line and, after passing

Card 2/3

L 17985-63

ACCESSION NR: AT3002082

through the test liquid, is again transformed into radio pulses by means of a quartz receiver. This signal subsequently is amplified in a RF receiver and delivered to an oscilloscope. The absorption is determined by varying the thickness of the test liquid and measuring the resulting damping of the signal. The equipment operates on 12 fixed frequencies in the range from 5.5 to 200 mcps. The component electronic circuitry and the acoustic system employed are described. The investigation of the absorption of US waves in nonassociating mixtures (benzol, m-xylol, p-xylol, chloral) is investigated in detail, and it is found that: (a) The addition of a small quantity of weakly absorbing liquid to a strongly absorbing liquid decreases the absorption coefficient sharply; (b) an equation is developed on the basis of simplified considerations to explain and predict the observed sharp decrease in absorption coefficient in such circumstances; (c) the absorption coefficient increases linearly with the temperature. The investigation was also extended to the absorption coefficient of associating mixtures (methylalcohol, ethylalcohol, iso-amyl chloride), and an absorption maximum was found to exist in all the mixtures investigated. The presence of this maximum is explained by the formation of a new compound. Orig. art. has 10 numbered equations, 12 figures, 3 tables, and a 3-page electronic-parts list.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 29Apr63

ENCL: 00

SUB CODE: AI, PH

NO REF Sov: 002

OTHER: 000

Card 3/3

L 33397-66 EWT(1) TG
ACC NR: AR6012312

SOURCE CODE: UR/0274/65/000/010/ .04/V004

AUTHOR: Vasil'yeva, M. G.; Berganov, I. R.

39
38
B

TITLE: Redundancy in the long-distance equipment

SOURCE: Ref. zh. Radiotekhnika i elekrosvyaz', Abs. 10V20

REF SOURCE: Tr. uchebn. in-tov svyazi. M-vo svyazi SSSR, vyp. 22, 1964, 152-158

TOPIC TAGS: system reliability, carrier current communication, communication equipment

ABSTRACT: Two reserving methods -- hot and cold -- are considered for the most important units of carrier-current communication equipment. The hot-reserve method largely used in group amplifiers has the following shortcomings: (1) the average time of operation of the equipment is shorter than the sum of possible average times of operation of each amplifier; (2) energy used for maintaining the reserve amplifier under operating conditions; (3) equal tube wear of the main and reserve amplifiers. The cold automatically switched reserve is free from the above shortcomings. The principal circuit of a monitoring-and-switching device is presented. The nonlinearity coefficient or the transmission level is recommended as a varying parameter which predicts the amplifier failure. Both reserving methods are compared by their mean times between failures. It is pointed out that the efficiency of the cold reserve is equal to 1.4 and 2 with an allowance for restoration. It is claimed

Card 1/2

UDC: 621.395.44.019.3

L 33397-66

ACC NR: AR6012312

that the cold reserve with the monitoring-and-switching devices increases the mean time between failures of the amplifier equipment and enhances the reliability of the entire channel. Four figures. Bibliography of 2 titles. D. B. [Translation of 25 abstract]

SUB CODE: 17, 09

Card 2/2

BEL'TSOV, V.M.; KHARKHAROV, A.A.; YEREMEYeva, R.F.; ANAN'YEVA, Ye.B.;
VASIL'YEVA, M.I.

Bleaching of cotton yarn and yarn products with sodium chloride.
Tekst. prom. 23 no.9:70-73 S '63. (MIRA 16:10)

1. Sotrudniki Leningradskogo tekstil'nogo instituta imeni
S.M. Kirova (LTI) (for Bel'tsov, Kharkharov). 2. Pryadil'no-ni-
tochnyy kombinat imeni S.M. Kirova (for Yeremeyeva). 3. Pryadil'no-
nitochnyy kombinat "Krasnaya Nit!" (for Vasil'yeva).
(Bleaching) (Yarn)

DERZHAVIN, A.V.; VASIL'YEVA, M.I.

New winter wheat varieties developed from spring wheat. Agrobiologiya
no. 3:118-119 My-Je '58. (MIRA 11:?)

1. Opytnoye khozyaystvo "Izd'ino", Kalininskoy oblasti.
(Wheat--Varieties)

L 1150-66 EWT(m)/EPF(c)/EPF(t)/EPF(b) IJP(c) JD/WB/
ACCESSION NR: AP5023686 UR/0076/65/039/009/2182/2187
620.191/.193

35
32
B

AUTHOR: Iofa, Z. A.; Huo Ngo-pa; Vasil'yeva, M. K.

44.55 44.55 44.55

TITLE: Effect of sulfur-containing compounds on iron corrosion in acid solutions

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 9, 1965, 2182-2187

TOPIC TAGS: corrosion inhibitor, iron, sulfuric acid, hydrogen sulfide, organic sulfur compound, sulfur compound, thiocyanate

ABSTRACT: The effect of hydrogen sulfide and other compounds containing sulfur on the adsorption of corrosion inhibitors (organic bases) by iron from sulfuric acid solutions was studied by means of the drop in the differential capacity of the double layer. The differential capacity was determined by an alternating current. An analysis of the polarization curves showed the mechanism of adsorption reinforcement and the generation of a strong inhibiting influence of organic bases on the corrosion of iron in acid solutions in the presence of corrosion stimulants such as hydrogen sulfide, sulfo acids, and other sulfur-containing compounds. The effect of potassium thiocyanate and thiourea and its derivatives on the acid corrosion of

Card 1/2

L 1150-66

ACCESSION NR: AP5023686

3

iron was also investigated. Orig. art. has: 6 figures, 1 table, 5 formulas.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow
State University)

SUBMITTED: 29May64

ENCL: 00

SUB CODE: GC,MM

NO REF Sov: 010

OTHER: 002

Card 2/2. SD

IOFA, Z.A.; KHO NGOK-BA; VASIL'YEVA, M.K.

Effect of the sulfur-containing compounds on iron corrosion in
acid solutions. Zhur. fiz. khim. 39 no.9:2182-2187 S '65.
(MIHA 18:10)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.
Lomonosova.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859010002-5

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859010002-5"

PHAS. I BANK EXPLOITATION 80V/3335

11(2,4)

Figure 1. Schematic diagram showing the relationship of fuel and products of combustion to community energy balance. (Ref. 10, Fig. 8.)

Sponsoring Agency: R.J.Y.S.M. Leningradsky ekonomicheskiy universitet, Leningrad, Sovet Sotsialisticheskikh Respublik, Sovet Narodov Sovetskogo Soyuza.

Ed.: V. N. Britov; *Reso. Ed.*: A. A. Chirkov; *Tech. Ed.*: A. B. Tsvetkov; *Editorial Board of series*: F. S. Borovsin, A. Ye. Drabkin, D. M. Kollerov, S. S. Semenov, and A. S. Potekov.

PURPOSE: This collection of articles is intended for scientific, engineering and technical personnel in plants of the fuel and gas industry.

CONTENTS The results of research and experimental work carried out

In 1957 and 1958 by the All-Union Scientific Research Institute for Shale Processing are summarized in this collection Organic components of oil shale from various regions, their chemical composition, and physical and chemical properties are reviewed, along with the production of oil from oil shale. Also discussed are: selection of oil shale, analysis of oil shale and shale fractions; selection of tar obtained in oil shale calcining; conversion of tar and the equipment used, hydrogenation of diesel fuel produced from oil shale, extraction of phenol, and purification of tar by aromatic and formaldehyde. Most articles are accompanied by figures. In addition, the book contains an annotated bibliography of 126 Soviet and non-Soviet works on the technology of shale processing.

Vernon, J. A., "Testing of Gas Generating Stations of the Oil
Fields of Venezuela," *Trans. Inst. Petrol.*, Vol. 1, No. 1, 1915, p. 52.

Proposed - **Plant** - **Producing** **Gas** **From** **Oil** **Shale** - **Prospects** **65**

Seleznev, S. J., and V. I. Zagorskii. *Vodnye i gornyye voprosy* (Water and Mountain Problems). Moscow, 1956. - 75

E.2
Method of Reagent Heat in the Laboratory and A. Y. DODD—Study of Toxicity

97
Saponification of Gasoline Produced from Light Fractions of Gasoline
for the Purpose of Octanizing Fuel Gases

106
Polymer and Corrosion of the Kostitsa-Tver-Leningrad Gas Pipeline

Thurber, V.L., and W.L. Elmanco. New Pipe Stills for Conversion of
Naphthalene Gas.

Glusman et al., V.O. and H.O. Pohl, Hydrogenation of Diesel Fuel 133
Produced From Oil shale

GOLODOVSKAYA, L. I., and S. S. MAZALOVA. Composition of Cheladex. Influence of Placing Properties of Neutral Oxygen Compounds Contained in Shale Tar Produced by Semicoking

Tobolsky, R.V. Pyrolysis of the Plastic Coated in Shale
far from the Furnace Chamber. With a Subjective Point up to 150°
Ways of Increasing Production of

17
Lapine, A. M., and S. G. Sennikov. Surface-Selective Components of Oil Shale Tar. *Voprosy Khimi i Tekhnologii Neftegaz. Dostizheniya Nauki i Tekhniki*, No. 1, p. 102, 1969.

Ivanov, B.I., and Yu.A. Kozak. Countercurrent Extraction of Phenol from the Furnace Gasholder

IVANOV, N.I., AND E.A. GALATKINA. Purification of Phenol Waters With Anionites of Oil Shale Tarry Waters

22
Produced During Thermal Conversion of Oil Shale by Means of Condensation With Formaldehyde

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859010002-5"

KOZAK, Yu.A.; IVANOV, B.I.; VASIL'YEVA, M.M.

Prospects for processing furnace shale tar. Trudy VNIIIPS no.4:
175-189 '55. (MIRA 13:4)
(Oil shales) (Tar)

BEZMOZGIN, E.S.; BARSHCHEVSKIY, M.M.; VASIL'YEVA, M.M.

Prospects for the use of oxygen in the shale-gas industry. Trudy
VNIIT no.8:66-74 '59. (MIRA 13:4)
(oil shales) (Oxygen)

BARSHCHEVSKIY, M.M.; BEZMOZGIN, E.S.; VASIL'YEVA, M.M.; ZAGLODIN, L.S.;
SINEL'NIKOV, A.S.

Efficient system of processing Baltic oil shales. Trudy VNIIT no.9:
4-9 '60.
(Oil shales)

KOZAK, Yu.A.; IVANOV, B.I.; VASIL'YEVA, M.M.

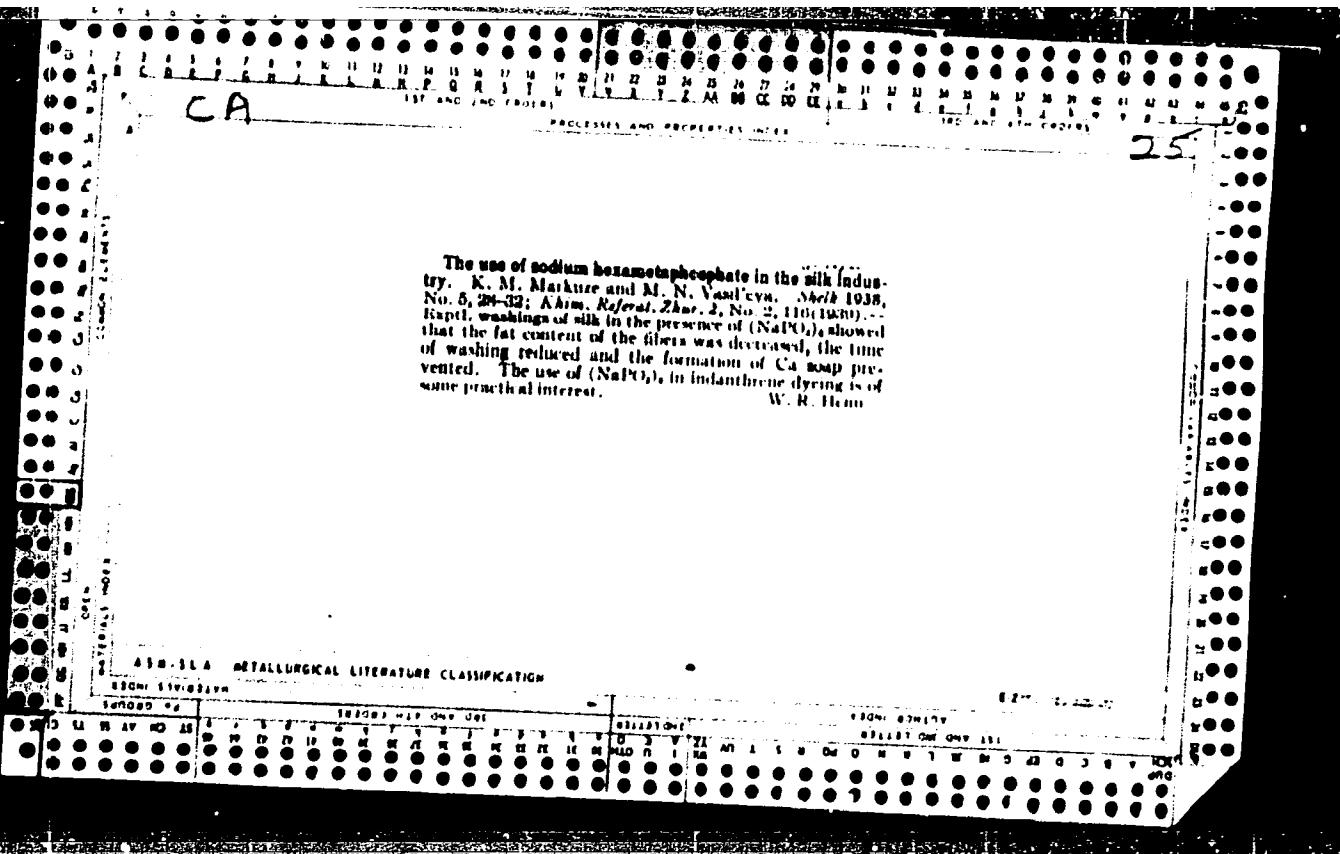
Prospects for processing furnace shale tar. Trudy VNIIPS no.4:
175-189 '55. (MIRA 13:4)
(Oil shales) (Tar)

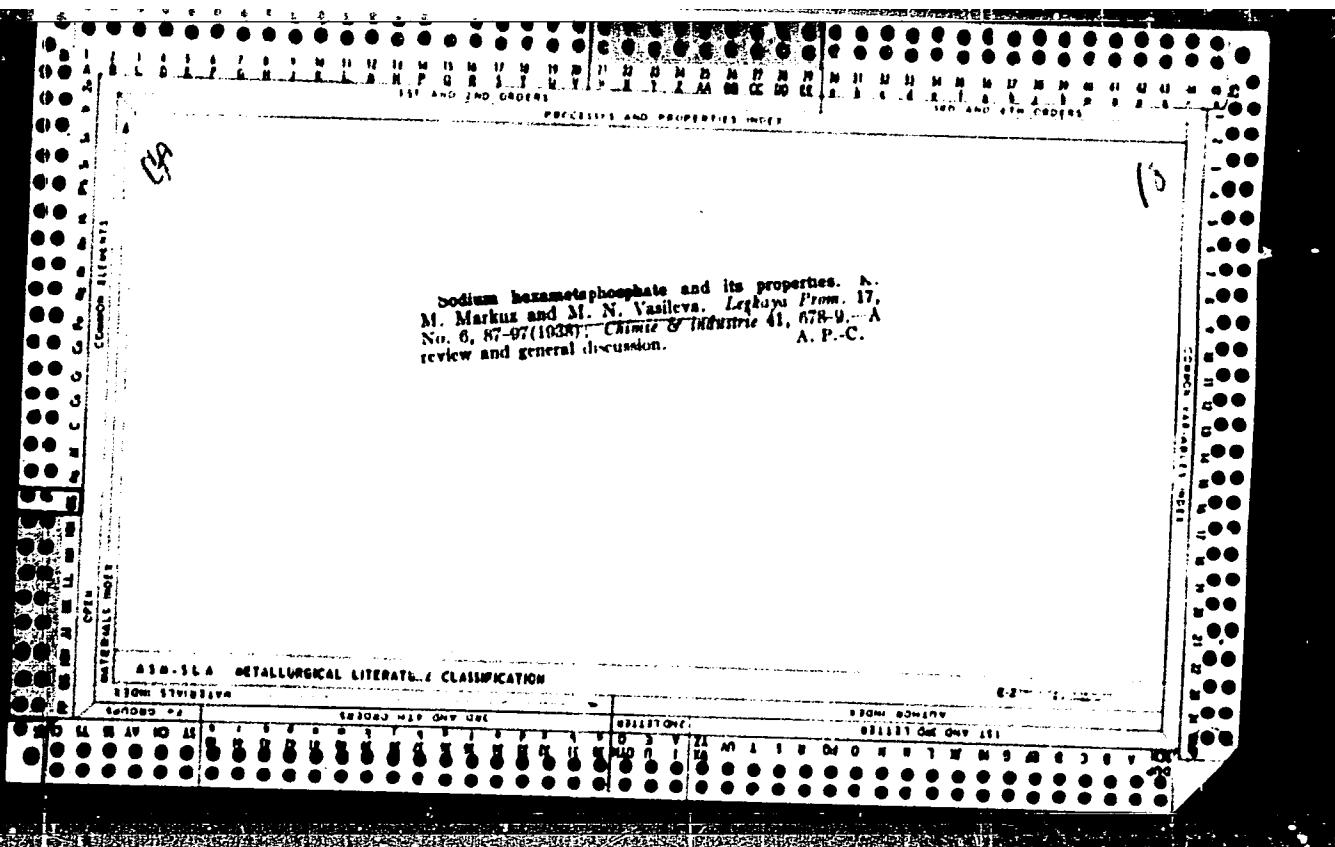
WILHELM FERD., PH. D.

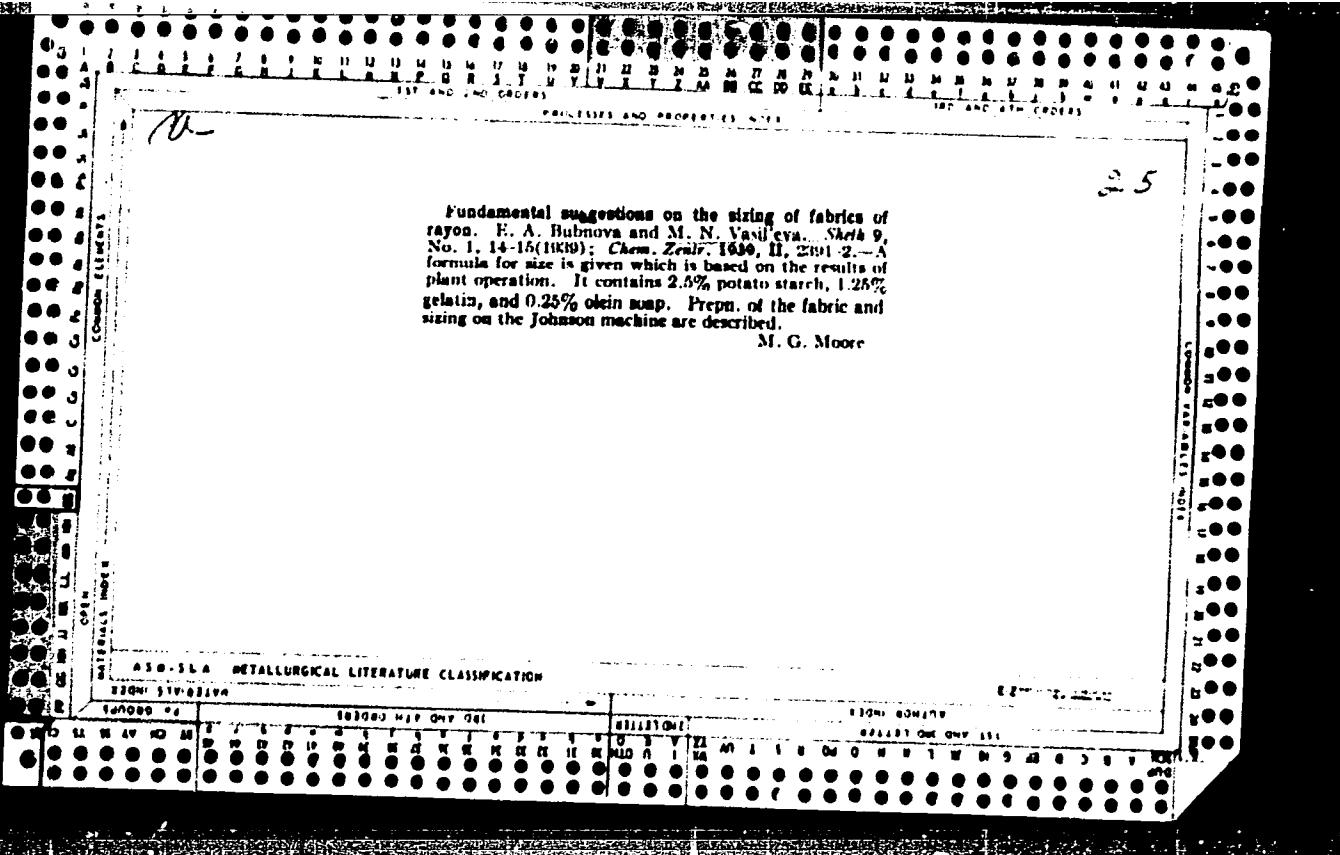
VASIL'YEVA, M.M.; SHKODINSKAYA, Ye.N.; BERLIN, A. Ya.

Sarcolysine isomers and their derivatives. Part 2: Synthesis of
o-bis (2-chloroethyl)amino-DL-phenylalanine. Zhur. ob. khim. 31
no.3:1027-1033 Mr '61.
(MIRA 14:3)

1. Institut eksperimental'noy klinicheskoy onkologii AMN SSSR.
(Alanine)







VASIL'YEVA, M.N., BUBKOVA, YE.A.

Sizing (Textile)

Gelatine sizing. Tekst. prom., 12, No. 4, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1952. UNCLASSIFIED.

VASIL'YEV, M. I.

Preparation of low-shrinkage fibers from staple and elementary viscose silk during the finishing process. M. N. Vasileva and V. K. Demidova. *Nauk.-Issledovat. Trudy Tsent. Nauch.-Issledovat. Inst. Stekh. Prom.* (Moscow) 1953, 68-101; *Izv. Akad. Nauk., Khim.* 1954, No. 3-609.—A technological regime has been worked out for the finishing of low-shrinkage staple linen and viscose silk, making use of melamine-TCFO resin (I). The prep. of a water-sol. condensate and the thermal conditions for the polycondensation of the methyl groups of melamine on the fabric are given. It decreases the abilities of swelling and shrinkage of the viscose silk and its deformation in the wet state, practically does not change its hydroscopicity, increases the strength of the fibers in the dry state, decreases slightly their lengthening, and highly increases the strength of the wet fiber, thus decreasing the wearing out of the staple fabrics during washing. The I treatment doubles the resistance of the fibers of mat silk against the destructive effect of light, however, no such effect is present in the case of the glossy viscose silk. The yield of the low-shrinkage staple fabrics accounts for 97-8% of the raw material used, which is characterized by the 16-18% shrinkage. B. Wiericki (1)

VASIL'YEVA, M.N.; GRANSKIY, V.I.; KRYUCHKOVSKIY, S.A.; VERSHIK,
A.M., kand. fiz.-matem. nauk, nauchn. red.;
TIKHOMIROVA, G.N., red.

[Mathematics for engineers; bibliography of recommended
literature] Matematika dlia inzhenerov; rekomendatel'-
nyi ukazatel' literatury. Moskva, Kniga, 1965. 157 p.
(MIRA 18:12)

1. Leningrad. Publichnaya biblioteka.

GINSBURG, V.A.; DUBOV, S.S.; MEDVEDEV, A.N.; MARTYNOVA, L.L.; TETFL'BAUM, B.I.;
VASIL'YEVA, M.N.; YAKUBOVICH, A.Ya.

Structure of the inclusion complexes of trifluoronitrosomethane with
unsaturated compounds and the mechanism of their formation. Dokl.
AN SSSR 152 no. 5:1104-1107 O '63. (MIRA 16:12)

1. Predstavлено академиком I.L.Kunyantsom.

GINSBURG, V.A.; VLASOVA, Ye.S.; VASIL'YEVA, M.N.; MIRZABEKova, N.S.;
MAKAROV, S.P.; SHCHEKOTIKHIN, A.I.; YAKUBOVICH, A.Ya.

Photoreaction of hexafluoroazomethane with unsaturated compounds.
Dokl.AN SSSR 149 no.1:97-99 Mr '63. (MIRA 16:2)

1. Predstavleno akademikom M.I.Kabachnikom.
(Azomethane) (Photochemistry) (Unsaturated compounds)

VASIL'YEVA, N.N.; BERLIN, A.Ya.

Synthesis of di(β -chloroethyl) amino derivatives of pyrocatechol.
Zhur. ob. khim. 32 no. 9:3088-3090 S '62. (MIRA 15:9)

1. Institut eksperimental'noy i klinicheskoy onkologii AMN SSSR.
(Pyrocatechol)

S/081/62/000/C24/040/052
B106/B186

AUTHORS: Vasil'yeva, M. N., Kamerina, T. P., Komarova, Ye. I.,
Zhestkova, Ye. N., Maslova, M. F., Smirnova, Ye. V.,
Ivanov, N. N., Bikbayeva, N. S., Koptyayeva, V. A.

TITLE: Choice of a new oiling agent for processing capron in
synthetic fiber plants

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 24 (II), 1962, 947,
abstract 24P979 (Nauchno-issled. tr. Tsentr. n.-i. in-t
shelk. prom-sti. M., Rostekhizdat, 1960 (1962), 82-94)

TEXT: On the basis of the results obtained in the testing of new oiling agents the authors recommend that 2.5 - 4.5% of the type K-160 (-160) should be applied to the fiber. The oiling agent consists of 82% Velosite '?(L), 6% OP-4 (OP-4) and 6% Stearoks-6. Twisting is to be stabilized by low-pressure steaming. [Abstracter's note: Complete translation.]

Card 1/1

VASIL'YEVA, M.N.; REYKIRUDEL', E.M.

Effect of a space charge on the electron kinetics in Penning's tubes.
Zhur. tekhn. fiz. 32 no.6:725-734 Je '62. (MIRA 15:7)

1. Fizicheskiy fakultet Moskovskogo gosudarstvennogo universiteta i
kafedra fiziki Moskovskogo aviationsonnogo ordena Lenina instituta
im. Sergo Ordzhonikidze.

(Electrical discharges) (Electrons)

24.6761
26.2312

AUTHORS: Vasil'yeva, M. N., and Reykhrudel', E. M.

TITLE: Effect of a space charge on the motion of electrons in a Penning tube

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 32, no. 6, 1962, 725 - 734

TEXT: The motion of electrons in a Penning tube (two cold disk cathodes placed symmetrically with regard to a ring anode) in a longitudinal magnetic field considered. The effect of a space charge is taken into account. It is shown that, owing to the space charge, regions of electron oscillation arise along the discharge axis. The frequency of these (harmonic or inharmonic) oscillations is of the order of 10^9 sec^{-1} . Frequency, amplitude, and character of these oscillations depend on the place z_0 at which the electron is produced in the discharge and also on the initial velocity \dot{z}_0 of the electron. If $A = \sqrt{(z_0 - p)^2 + \dot{z}_0^2/\omega^2}$ (where d is the distance between the cathode plane and the anode plane,

Card 1/3

S/057/62/032/006/013/022
B108/B102

Effect of a space ...

and where p represents the value at which the distribution curve of the magnetic potential $\psi(z)$ has its maximum), then when $A > (d-p)$ the electron will perform inharmonic oscillations of a frequency less than that of the harmonic oscillations which arise in the absence of a space charge. If $A \leq (d-p)$ the electron will not reach the anode plane but will perform harmonic oscillations of a frequency greater than that without a space charge. The frequency is independent of the initial conditions. The critical magnetic field in the case of a space charge is always greater than the critical field without a space charge. The electron trajectories in the anode plane r_0 are confined in the interval $r_1 \leq r \leq r_2$, where r_1 and r_2 are the positive roots of the equation $-Ar^4 - 2Cr^3 + C_1r^2 - B = 0$. Here r_1 and r_2 depend on the discharge parameters and on the initial conditions. This interval decreases and increases in proportion with r_0 . A space charge also reduces this interval and causes the discharge to pinch. The frequency of the hydromagnetic oscillations depends on the initial conditions and is greater in the case with a space charge than without. There are 3 figures and 3 tables.

Card 2/3

Effect of a space ...

S/057/62/032/006/013/022
B108/B102

ASSOCIATION: Fizicheskiy fakul'tet MGU, Kafedra fiziki MAI (Physical
Division MGU, Department of Physics MAI)

SUBMITTED: July 17, 1961

Card 3/3

VASIL'YEVA, M.N.; REYKHRUDEL', E.M.

Effect of space charge on electron kinetics in a longitudinal magnetic field. Radiotekh. i elektron. 5 no.12:2065-2068 D'60.
(MIRA 13:11)

1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta.
Kafedra fiziki Moskovskogo aviationsionnogo ordena Lenina
instituta im. S.Ordzhonikidze.
(Magnetic fields) (Electrons)

9.3140 (2301,1140,1141)

20435
S/109/60/005/012/035/035
E192/E382

AUTHORS: Vasil'yeva, M.N. and Reykhrudel', E.M.

TITLE: Influence of the Space Charge on the Kinetics of
Electrons in a Longitudinal Magnetic Field

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol. 5,
No. 12, pp. 2065 - 2068

TEXT: The problem of electron kinetics in a discharge between a ring anode and two cold cathodes symmetrically situated on both sides of the anode in a longitudinal magnetic field H was considered in a number of works (Refs. 1, 2) without taking into account the space charge. It was shown, however, (Ref. 2) that even at small currents and pressures of the order of 10^{-4} to 10^{-5} mm Hg space charges could appear which change substantially the potential distribution in the discharge gap. In the following the problem of electron motion in the longitudinal magnetic field H and a nonhomogeneous, axially-symmetrical electric field is considered. The potential distribution of this field is described by the functions $\varphi(z)$ and $\varphi(r)$, which take into account the presence of the

X

Card 1/7

20435

S/109/60/005/012/03-/035
E192/E382

Influence of the Space Charge on the Kinetics of Electrons in
a Longitudinal Magnetic Field

space charge. The first function is expressed by

$$\varphi(z) = \frac{5\varphi_0}{d(6p - d)} (-z^2 + 2pz) \quad (1)$$

where d is the distance between a cathode and the plane of
the anode,

p is the value of z at which the potential
distribution curve has a maximum,

φ_0 is the potential at the centre of the tube at
 $z = d$ in the absence of the space charge ($p = d$).

The second function is given by:

$$\varphi(r) = \frac{\varphi_a = K\varphi_0}{r_a(r_a - 2q)} (r^2 - 2qr) + K\varphi_0 \quad (2)$$

Card 2/7

20435

S/109/60/005/012/033/035
E192/E382

Influence of the Space Charge on the Kinetics of Electrons in
a Longitudinal Magnetic Field

where r_a is the radius of the anode ring,

q is the value of r corresponding to the minimum
of $\varphi(r)$,

φ_a is the potential of the anode and

$$K = (r_a - 2q)/(r_a - q).$$

The equations of motion in cylindrical coordinates are as
follows:

$$m\ddot{z} = e \frac{\partial \varphi}{\partial z}. \quad (3)$$

$$m(\ddot{r} - r\dot{\theta}^2) = e \frac{\partial \varphi}{\partial r} - \frac{e r \dot{\theta}^2 H}{c}, \quad (4)$$

$$m \frac{1}{r} \frac{d}{dt}(r^2 \dot{\theta}) = \frac{e r^2 H}{c}. \quad (5)$$

Card 3/7

20435

S/109/60/005/012/033/035
E192/E382

Influence of the Space Charge on the Kinetics of Electrons in
a Longitudinal Magnetic Field

The solution of Eq. (3) for the condition $t = 0$, $z = z_0$ and
 $\dot{z} = \dot{z}_0$ is in the form:

$$z = A \sin(\omega t + \alpha) + p \quad (6)$$

where:

$$\omega = \sqrt{\frac{10 e \varphi_0}{md(6p - d)}} ; \quad A = \sqrt{(z_0 - p)^2 + \frac{z_0^2}{\omega^2}} ;$$

$$\operatorname{tg} \alpha = \frac{z_0 - p}{z_0} \quad \omega .$$

Card 4/7

20435
S/109/60/005/012/03 /035
E192/E382

Influence of the Space Charge on the Kinetics of Electrons in
a Longitudinal Magnetic Field

By investigating the above solution it is seen that the space charge leads to the formation of two types of electron oscillations along the axis z : 1 - nonharmonic oscillations with respect to the anode plane having a frequency ω_1 ;

2 - harmonic oscillations relative to the plane $z = p$ corresponding to the maximum of $\varphi(z)$. The motion of an electron in the anode plane $r \in$ in the presence of the space charge is also investigated. It is shown that the solution for r as a function of time is in the form of the following integral:

$$t = \int_{r_0}^r \frac{r dr}{\sqrt{-Ar^4 - 2Cr^3 + C_1 r^2 - B}} \quad (9)$$

Card 5/7

20435

S/109/60/005/012/035/035
E192/E382

✓

Influence of the Space Charge on the Kinetics of Electrons in
a Longitudinal Magnetic Field

This integral cannot be solved exactly but approximate solutions for the case of under-critical and over-critical magnetic fields are derived. An approximate equation for $\dot{\theta}(t)$ is also given. From the analysis of these solutions it is found that an electron oscillates in the plane $r\theta$ between r_1 and r_2 and, simultaneously, it rotates with a frequency which is not less than the Larmor frequency. The presence of the space charge leads to:

- 1) an additional contraction of the charge;
- 2) appearance of gyromagnetic oscillations whose frequency depends on the initial conditions r_0 and $\dot{\theta}_0$, and
- 3) the possibility of resonance oscillations.

Card 6/7

20435
S/109/60/005/012/035/035
E192/E382

Influence of the Space Charge on the Kinetics of Electrons in
a Longitudinal Magnetic Field

There are 3 figures and 3 references: 2 Soviet and 1 non-Soviet.

ASSOCIATIONS: Fizicheskiy fakul'tet MGU (Physics Department
of MGU)
Kafedra fiziki MAI (Chair of Physics of MAI)

SUBMITTED: April 2, 1960

X

Card 7/7

GINSEBURG, V.A.; VASIL'YEVA, M.N.; DUBOV, S.S.; YAKUBOVICH, A.Ya.

Reactions of phosphites with azo compounds. Zhur. ob. khim. 30
no.9:2854-2863 S '60. (MIRA 13:9)
(Phosphites) (Azo compounds)

69902

S/109/60/005/04/016/028
E140/E435

9,3150

AUTHORS: Reykhrudel', E.M., Smirnitskaya, G.V. and
Vasil'yeva, M.N.TITLE: Certain Characteristics of Discharges in an Ion Pump
and Magnetic Ionization ManometerPERIODICAL: Radiotekhnika i elektronika, 1960, Vol 5, Nr 4,
pp 662-665 (USSR)

ABSTRACT: It was shown previously (Ref 1,2) that under certain conditions a series of sharply defined ionization regions may form in a low-pressure electric discharge with cold cathode in an external magnetic field. In the present article the volt-ampere characteristics of such discharges are presented and the ion-velocity distribution close to the cathode given together with a comparison of the processes accompanying ignition of the discharge in the magnetic field with processes in a vacuum arc. Drawn-out ignition was used (Ref 3), reaching several minutes, permitting measurement of pre-breakdown currents by a pointer instrument. Slow discontinuous increases of current were observed which, at a certain value of current, lead to sharp increase of the latter and the ✓

Card 1/2

69902

S/109/60/005/04/016/028
E140/E435

Certain Characteristics of Discharges in an Ion Pump and Magnetic
Ionization Manometer

ignition of the autonomous discharge. This is explained by the appearance of microdischarges and the evolution of gas with ion bombardment from the active sections of the cathode. The range of ion energies in the cathode region is approximately 250 V, occurring in several groups, confirming the existence, under certain conditions, of several ionization regions. The initial state of each breakdown in high vacuum in the presence of a cold cathode is the formation of individual emission centers on the cathode and the evolution from them of gas and metal vapor under the action of ion bombardment. There are 3 figures and 6 references, 5 of which are Soviet and 1 English.

ASSOCIATION: Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo
universiteta im. M.V.Lomonosova (Physics Department of
Moscow State University imeni M.V.Lomonosov)

SUBMITTED: June 1, 1959

Card 2/2

X

79-28-4-47/60

AUTHORS: Berlin, A. Ya., Vasil'yeva, M. N.

TITLE: Synthesis of the Diethylene Imide of 4-Methyl Uracil-5-Methylene-Phosphinic Acid (Sintez dietilenimida 4-metiluratsil-5-metilen-fosfinovoy kisloty)

PERIODICAL: Zhurnal Obsnchey Khimii, 1958, Vol. 28, Nr 4, pp. 1063-1065 (USSR)

ABSTRACT: Looking for new chemical means against malignant neoplasms many scientists observed compounds with alkylating effects and containing β,β' -dichlorodiethyl-amino and ethylimino groups. The recently synthesized hydrochloride of p-(β,β' -dichlorodiethyl amino)-phenylalanine (sarcolysin) (Ref 1) is one of the most interesting representatives of this type since its application in medicine made possible for the first time effective treatment of some kinds of genuine tumors in man (Ref 2). The molecule of sarcolysin contains a reactive alkylating dichlorodiethyl amino group combined with the rest of phenylalanine which plays an important part in the albumin metabolism. Looking for compounds of analogous structure and possibly analogous effects the authors synthesized diethylene imide of the 4-methyl

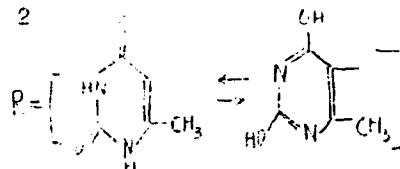
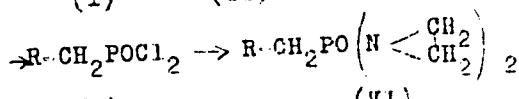
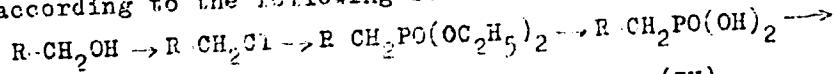
Card 1/4

VASIL'YEVA, M. N.

79-20-4-47/60

Synthesis of the Diethylene Imide of 4 Methyl Uracil-5-Methylene-Phosphinic Acid.

uracil-5-methylene-phosphinic acid which contains a reactive cytotoxic diethylene phosphoamido grouping bound to the rest of an uracil derivative which occurs like some of its derivatives in nucleic acids. Synthesis was carried out according to the following scheme:



The conversion of the 4-methyl-5-oxymethyluracil ("pentoxyl", formula I) into the corresponding chloride (II) demanded careful selection of the reaction conditions, since on this occasion not only the hydroxyl group in the side chain but

Card 2/4

72 28 4-47/60

Synthesis of the Diethylene Imide of 4 Methyl Uracil-5 Methylenephosphinic Acid.

also the hydroxyl groups of the lactim form of the uracil ring (Ref 3) may be exchanged with chlorine. It was found that the reaction between pentoxy and thionyl chloride is carried out best in chloroform in the cold and under the presence of 1 mol pyridine. A pyridine excess leads to strong resinification. According to the reaction by Arbuzov the diethyl ester of 4 methyluracil-5 methylene phosphinic acid (III) was produced by the action of triethyl phosphite on compound II. If heated in hydrochloric acid this compound yielded a considerable amount of the corresponding acid (IV). The conversion of this phosphinic acid into its diacid chloride equally made necessary to carry out carefully the reaction since also in this case the already mentioned possibility of unwanted exchange of the hydroxyl groups of the lactim form of the uracil ring with chlorine is given. Even in the case of not rigorous conditions reaction does not take place clearly; a compound of various materials forms from which the acid chloride (IV) could not be separated in its pure form. However, its formation in this reaction is proved for in the action of anhydrous alcohol on the mentioned compound diethyl ester (III) forms in a

Card 3/4

79 28-4-47/60

Synthesis of the Diethylene-imide of 4-Methyl-Ureacil 5-Methylene Phosphinic Acid

yield of 21 %. In analogous way diethylene-imide of the 4-methyl ureacil 5-methylenephosphinic acid (VI) forms a crystallized compound during the action of ethyleneimine on the reaction product of the phosphinic acid (IV) with thionyl chloride (Ref 6) which changed when heated in a capillary without showing a certain melting point. M. I. Kabachnik and T. Ya. Medved' kindly devoted themselves to the described work. The method of synthesis is described in detail in an experimental chapter. There are 6 references, 2 of which are Soviet.

SUBMITTED: March 27, 1967

Card 4/4

VASIL'YEVA, M.N.

BERLIN, A.Ya.; VASIL'YEVA, M.N.

Synthesis of diethylimides of 4-methyluracyl-5-methylenephosphoric acid. Zhur. ob. khim. 28 no.4:1063-1065 Ap '58. (MIRA 11:5)
(Phosphoric acid) (Imides)

VASIL'YEVA, M.P.

Effect of royal jelly preparation on the development of young
white mice. Informbiul.o mat.moloch. no.3:16-19 '62. (MIRA 16:2)

1. Kafedra pediatrīi (zav. prof. R.A. Patushinskaya) i kafedra
farmakologii (zav. dotsent A.A. Nikulin) Ryazanskogo meditsinskogo
instituta imeni akademika I.P. Pavlova.
(ROYAL JELLY—PHYSIOLOGICAL EFFECT) (LABARATORY ANIMALS)

VASIL'YEVA, M.P.

Use of royal jelly preparation in the treatment of dystrophy
in infants. Inform.biul. o mat.moloch. no.3:54-58 '62.
(MIRA 16:2)
1. Kafedra pediatrii (zav. prof. R.A. Patushinskaya) Ryazanskogo
meditsinskogo instituta imeni akademika I.P. Pavlova.
(ROYAL JELLY—THERAPEUTIC USE) (DYSTROPHY)

VASIL'YEVA, M.P.

GLADISHEVS'KIY, Ye.I.; ABLITSOVA, R.I., student III kursu; VASIL'YEVA, M.P.,
student III kursu.

Kinetics of substitution reaction of nickel and copper powders.
Nauk.zap.L'viv.un. 21:105-109 '52. (MIRA 10:7)

1. Kafedra neorganichnoi khimii.
(Substitution (Chemistry)) (Nickel) (Copper)

VASIL'YEVA, M.S.

From the history of the exploration and study of the territory
of the Dzhezkazgan industrial region. Trudy otd. geog. AM
Kazakh. SSR no.9:131-142 '62. (MIRA 15:6)
(Dzhezkazgan District--Geography)

VASIL'YEVA, M.T.; CHERFAS, T.O., inzhener laboratorii; KOCHETKOV, I.S.,
inzhener; STEPANENKOV, D.A., inzhener.

Reports. Use of KMTs preparation in sizing. Tekst.prom. 14 no.10:
56 O '54. (MLRA 7:10)

1. Leningradskaya fabrika imeni A.Anisimova (for Churfas). 2. Na-
chal'nik tsekha Leningradskoy fabriki imeni A.Anisimova (for Va-
sil'yeva) 3. TSentral'naya nauchno-issledovatel'skaya laborato-
riya Glavmoskhlopproma (for Kochetkov). 4. Yakhromskaya fabrika
(for Stepanenkov).

(Sizing (Textile))

VASIL'YEVА, M. V.

Vasil'yeva, M. V., and Domrachev, V. M. - "An experiment on the use of antiroticular cytotoxic series of Acade Mician Bogomolets for the treatment of Exanthematic Typhus Typhoid," Trudy Krymsk. med. in-ta im. Stalina, Vol. XII, 1948, p 311-16

SO: U-3950, 16 June 53. (Letopis, Izhurnal 'nykh Statey, No. 5, 1949).

VASIL'YEVA, M.V.; KHALETSKIY, A.M.

Molecular compound of β -sitosterol with metal chlorides.
Zhur. ob.khim. 34 no. 5:1400-1401 My '64. (MIRA 17:7)

1. Leningradskiy khimiko-farmatsevticheskiy institut.

VASIL'YEVA, M.V.; KHALETSKIY, A.M.

Oxidation of isomeric 5,6-dibromo- β -sitostanol. Zhur. ob. khim. 33
no.12:3831-3833 D '63. (MIRA 17:3)

1. Leningradskiy khimiko-farmatsevticheskiy institut.

KSENOFONTOVA, Ye. V.; VASIL'YEVA, M. V.; KHALETSKIY, A. M.

Oxidation of isomeric β -sitosterol 5,6-dibromides. Zhur. ob.
khim. 32 no.12:4013-4015 D '62. (MIRA 16:1)

1. Leningradskiy khimiko-farmatsevticheskiy institut.

(Sitosterol) (Oxidation)

KHALETSKIY, A.M.; VASIL'YEVA, M.V.

Sulfoethers of sterols and their transformations. Part 2:
Reactivity of ~~the~~-^{ster}osterol sulfoether salts. Zhur. obshch. khim. 33 no.4:
1104-1107 Ap '63. (MIRA 16:5)

1. Leningradskiy khimiko-farmatsevticheskiy institut.
(Sterols)

VASIL'YEVA, M. V.

Jun 53

USSR/Medicine - Tularemia

"Periods of Reinoculation of Subjects Inoculated Against Tularemia and Persistence of the Reaction to Tuberculin in Those Who Have Been Inoculated," M. V. Vasil'yeva, G. E. Afremova, V. A. Strigin, N. N. Slepneva, G. A. Dashkina, i fa Inst of Epid and Microbiol im I. I. Mechnikov; Republic (Bashkir Assr?) San-Epidemiol Sta Zhur Mikro, Epid, i Immun, No 6, pp 50-51

After inoculation, 90.4% of subjects in areas exposed to tularemia gave a positive reaction to tularin within 2 mos, 81.3% within 6 mos, 79.6% within 1 yr, and 74% within 2 yrs. After reinoculation, the figures were 91.8% in 2 mos, and 91.3% in one year. Reinoculation was carried out 1 year after original inoculation.

267T21

VASIL'YEVA M. V.

USSR/Diseases of Farm Animals. Diseases Caused
by Bacteria and Fungi

R-2

Abs Jour: Ref Zhur - Biol., No 1, 1959, 2834

Author : Vasil'yeva, M. V., Slepneva, N. N.,
Tazetdinova, S. Z., Kyrchikov, B. A.

Inst : Ufa Scientific Research Institute of
Vaccines and Sera

Title : The Significance of Serological Examina-
tions of Farm Animals for Controlling
Natural Tularemia Foci

Orig Pub: Tr. Ufimsk. n.-i. in-ta vaktsin i syvorotok,
1957, vyp. 4, 35-43

Abstract: No abstract

Card 1/1

15

NIKOLAYEV, B.G.; VASIL'YEVA, M.V.

Some quantitative investigations of the diffraction of waves corner
regions. Uch.zap. LGU no.246:71-166 '58. (MIRA 12:2)
(Waves—Diffraction)

VASIL'YEVA, M.V.

Clinical aspects and treatment of patients with hemorrhagic vasculitis.
Vop. okh. mat. i det. 6 no.9:57-61 S '61. (MIRA 14:9)

1. Iz 1-go terapevтического отделения (зав. М.В.Васил'ева) Детской
бол'ницы имени К.А.Раковского (главный врач Я.Н.Сперанская).
(PURPURA (PATHOLOGY))

VASIL'YEVA, M. V.; KHALETSKIY, A. N.

Transformations of lignocetyl alcohol. Zhur. ob. khim. 34 no.5:
1771-1772 Je '64. (MIRA 17:7)

1. Leningradskiy khimiko-farmatsevicheskiy institut.

VASILIEVA, N.V.

Invariant description of Cartan's integral geometry. Bon. 1966
MHD no.203; 7b-85 '63.

Analytic projective geometry. b61, r152.042 MHD 77-11

KHALETSKIY, A.M.; VASIL'YEVA, M.V.

Sulfonic esters and their transformations. Zhur.ob.khim. 31
no.9:2996-3000 S '61. (MIR 14:9)

1. Leningradskiy khimiko-farmatsevticheskiy institut.
(Sterols) (Sulfonic acid)

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FINIKOV, Sergey Pavlovich; VASIL'YEVA, M.V., redaktor; GAVRILOV, S.S.,
tekhnicheskiy redaktor

[Theory of congruent pairs] Teoriia par kongruentsii. Moskva,
Gos. izd-vo tekhniko-teoret. lit-ry, 1956. 443 p. (MIRA 10:4)
(Congruences (Geometry))

MATVEYeva, N.N.; SMIRNOVA, Z.M.; KUSTOVA, Z.M.; VASIL'YEVA, M.V.; GEL'CHINSKIY, B.Ya.; OZEROV, D.K.; MANUKHOV, A.V.; GOL'TSMAN, F.M.; PETRASHEN', G.I., red.; VOLKHOVER, R.S., tekhn. red.

[Papers on the quantitative study of seismic wave dynamic] Materialy kollektivnogo izuchenija dinamiki seismicheskikh voln. Pod. rukovodstvom i red. G.I.Petrashen'. [Leningrad] Izd-vo Leningr. univ. Vol. 1. 1957. 420 p. Vo.2. 1957. 152 p. (MIRA 11:2)

1. Akademija nauk SSSR. Matematicheskiy institut, Leningradskoye otdeleniye.
(Seismometry)

VASIL'YEVA, M.V.

Taxonomic position and distribution of the susliks *Citellus*
citellus L. and *C. xanthopygmus* Benn. Sbor. trud. Zool. muz.
MGU 8:253-260 '61. (MIRA 15:5)
(Susliks)

ANANASYAN, Levon Sergeyevich; VASIL'YEVA, Mayya Vladimirovna,
dots.; GUREVICH, Grigoriy Borisovich; IL'IN, Aleksandr
Sergeyevich; KOZ'MINA, Tat'yana Leonidovna; RELOZUBOVA,
Ol'ga Sergeyevna; DOLGOPOLOV, V.G., red.

[Problems in elementary geometry; textbook for pedagogical
institutes] Sbornik zadach po elementarnoi geometrii; po-
sobie dlia pedagogicheskikh institutov. Izd.2., perer. Mo-
skva, Prosveshchenie, 1964. 93 p. (MIUA 17:7)

VASIL'YEVA, M.V.

Finsler geometry in an invariant representation. Uch. zap.
MGPI no. 243:38-54 '65 (MFA 19:1)

Invariant description of certain Finsler geometries. Ibid.:
55-68.

Interpretation of Lobachevskii geometry in synthetic presenta-
tion. Ibid. 385-417

VASIL'YEVA, M.V.

Taxonomic relationship of mountain susliks (*Citellus*, *Glires*, *Mammalia*)
of the Tien Shan. Zool. zhur. 43 no.6:904-909 '64. (MIRA 17:12)

1. Zoological Museum of the Moscow State University.

VASIL'YEVA, M.S.; CHIGARKIN, A.V.; KONOBRITSKAYA, Ye.M., kand.geogr.nauk,
otv.red.; POTAPOV, I.Ye., red.; VELICHKO, G.N., tekhn.red.

[Nature and economy of the Dzhezkazgan industrial region] Pri-
roda i khoziystvo Dzhezkazganskogo promyshlennogo raiona.
Alma-Ata, Izd-vo Akad.nauk Kazakhskoi SSR, 1959. 96 p.
(MIRA 13:1)

(Dzhezkazgan District--Economic conditions)

VASIL'YEVA, M. YA. Cand. Physicomath. Sci.

Dissertation: "Certain Problems in the Investigation of Corona Discharge."
Moscow Order of Lenin State U. imeni M. V. Lomonosov, 28 May, 1947.

SO: Vechernaya Moskva, May, 1947 (Project #17836)

VASIL'YEVA, M. YA.

142-2746

USSR/Electricity - Corona Discharge May 52

"Influence of the Ground on Corona Discharge Between Two Conductors," M. Ya. Vasil'yeva, Laboratory of Electron and Ion Processes

"Vest Moskov U, Ser Fiz, Mat, i Yest Nauk" No 3,
pp 41-46

Establishes experimentally the influence of surrounding objects on behavior of reduced characteristic $I/V = f(U)$ and clarifies the dependence of the initial voltage of corona discharge between two electrodes, of which one is grounded, upon the distance of surrounding objects. Received 23 Nov 51.

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JAN 12 1970, 1970.

Chemical Abst.
Vol. 48 No. 4
Feb. 25, 1954
Electronic Phenomena and Spectra

The initial potential gradient [required for] a corona discharge as a function of electrode separation. ¹¹ ¹²
Vasilev, Moscow State Univ., Tekhn. Moshch., Ussr. 7,
No. 6, Ser. Fiz.-Mat. i Estestven. Nauk No. 4, 33-4(1952). —
A dependence of the initial potential gradient for corona discharge not predicted by the Townsend-Rogovskif theory had previously been observed for a wire cathode and a plane anode (Meer, et al., Zhur. Tekh. Fiz. 9, 1364(1930)). This dependence is now found also to obtain for the following pairs of electrodes: coaxial cylinders; wire anode and plane cathode; bipolar corona between 2 parallel wires.

Cyrus Feldman

(6-3-54)

VASIL'YEV, M. YA.

Electric Discharges

Effect of the earth on the corona discharge between two conductors. Vest. Nauk. in. ? no. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, November 1957, Uncl.

VASIL'Yeva, M.Ya.

Category : USSR/Electronics - Gas Discharge and Gas-discharge Instruments

H-7

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 4312

Author : Vasil'eva, M.Ya., Tsygankova, I.I.

Title : Effect of Small Nitrogen and Oxygen Impurities on the Current of a Non-Self-Sustaining Discharge and Determination of the Percentage Nitrogen Content in Argon.

Orig Pub : Vestn. Mosk. un-ta, 1955, No 12, 81-86

Abstract : An experimental investigation is made of the problem of the qualitative independence of the slope of the voltage-current characteristics of the non-self-sustained discharge current in argon on the presence of oxygen and nitrogen impurities in the argon. The investigations were carried out at argon pressures of 3 mm mercury. The voltage-current characteristics were plotted for the following impurity concentrations: 10^{-3} , 10^{-2} , 1, and 2%. A sharply pronounced reduction in current is obtained with impurities from $10^{-2}\%$ and above. The reduction in current is caused by the disturbance of the metastable atoms of argon upon collision with the impurity molecules. It is proposed to use the described phenomenon for the determination of the percentage content of nitrogen in argon for concentrations from 1×10^{-3} to 2%.

Card : 1/1

Chair of Electronics

VASIL'YEVA, M. Ya.

337 521.6 521 387

52200 STUDY OF THE DIFFERENCE BETWEEN IONIZATION AND EXTINCTION COEFFICIENTS IN A GAS DISCHARGE UNDER VARIOUS CONDITIONS. BY R. H. MANDERS. JOURNAL OF RESEARCH, U. S. NATIONAL BUREAU OF STANDARDS, PART A, V. 70, NO. 1, APRIL 1962.

ABSTRACT. The ionization coefficient is found to increase in steps as a function of the voltage difference between the electrodes. Increase of e.g., pressure and causes increase of the voltage difference. Shape of the electrodes affects the results, the difference of the two potentials being greater when the cathode is plane and the anode spherical than for the opposite case or for two plane electrodes. Experiments were performed with electrodes of Ni and Al.

C. R. B. Manders

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VASIL' YEV, N.YA.

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AUTHORS:
Granovskiy, V.I., Luk'yannov, S.N., Spivak, G.V. and
Slobotenko, I.G.
TITLE:
Report on the Second All-Union Conference on Gas
Electronics

PERIODICAL: Radiotekhnika i elektronika, 1959, Vol. 4, Nr. 8,
pp. 1359 - 1358 (USSR)

J.M. Podgorny and N.G. Koval'chik - "New Data on X-ray
Radiation During Pulse Discharges".
V.A. Khariton and M.M. Lukovskaya dealt with the investi-
gation of the interaction of radiation in powerful gas discharges
in chambers with conducting walls.
N.A. Burenkov et al. - "Investigation of the Gas Discharge
in a Conical Chamber".
S.M. Ogorodnik et al. - "A Turn of Plasma in Transverse
Magnetic Fields".
I.G. Krasnoper - "Data on the Division of a Cathode Spot
on Mercury in a Low-pressure Arc" (see p 1280 of the
Journal).
A.S. Robinson (England) - "A New Theory of the Cathode Spot"
(see p 1395 of the Journal).
L.M. Brumarka - "Positive Column in a Hydrogen Discharge
With Stationary and Pulse Loads".
Yu.G. Mekrashvich and A.A. Landa - "Current Distribution on
the Surface of Electrodes in Electric Pulse Discharges".
L.M. Myr - "Some Properties of Gas Discharge in Low-voltage
Gases" (in Russian).
G.I. Glotova and V.I. Grigor'yan - "Comparison of the
Initial De-ionisation in the Isotopes of Hydrogen (H,
D, T)".
L.A. Abrikosova communicated some results on the pre-breakdown
currents at low pressures.
M.Ya. Kondratenko and A.A. Zaytsev - "Charge-density
Distribution Curves in Cylindrical Plasma".
J. Skrzeflik of Czechoslovakia communicated some information
on the wave-like phenomena in gas-discharge plasmas.
S.G. Shestopalov dealt with the problem of the determination
of the energy of fast ions in pulse discharge devices.
B.N. Radzinskay - "Connection Insensitivity of Plasma Drifts".
Yu.L. Maksimchik and V.D. Shefranov - "Theory of a High-
temperature Plasma Series".
The fifth section was presided over by N.A. Kapitov and
dealt with high-frequency currents in gases. The following
papers were read:
V.Ye. Gol'dansk - "Formation of Ultra-high Frequency Pulse
Discharges in Liquid Gases".
G.L. Petryuk - "Influence of the Boundary Conditions on
the Propagation and Maintenance of High-frequency Discharges".
P.B. Shul'pin et al. - "Investigation of a Self-maintained
Ultra-high Frequency Pulse Discharge and the Process of
Its Development".
G.I. Zelenker and G.I. Solntseva - "Some Results of the
Investigation of the Formation of Low-pressure High-
frequency Discharges".
D.U. Marzenau (USA) - "Conductivity of Weakly Ionised
Plasma".

A.A. Kuznetsov - "The Conditions of Transition From
High-Frequency Corona Discharge at Atmospheric Pressure".
V.Ia. Gol'dansk - "The Relation Between the Character-
istics of The Ultra-high Frequency Current and the Direct
Current in Gas Discharges".
B.B. Leont'ev analyzed the conductivity of the discharg-
ing plasma in the vicinity of a resonance discharge
tube.
S.M. Larikovsky and L.P. Shabashova dealt with the
applicability of the probe method with the
discharges (see p 1358 of the Journal).
The paper by V. Ye. Mitsuk et al. was devoted to the
investigation of the ultra-high frequency plasma by
means of the Stark effect.
G.S. Solntsev et al. deals with the problems of electric
fields in a high-frequency discharge at low pressures.
Yu. B. Budaev of Russia read a paper entitled "High-
frequency Discharges in Methane".
The work of the sixth section was devoted to the problems
of plasma and its radiation. The section was presided
over by V.A. Rubtsov. The following papers were read:
Yu. N. Kiselev - "New Probe Methods of Plasma
Investigation";
N. G. Koval'chik - "Oscillatory Measurements in Plasma".
V. Ye. Mitsuk and A. A. Leont'ev - "Investigation of the
Properties of the Ultraviolet Spectrum of Plasma".